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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,482	07/24/2003	Jon O. Reynolds	ITW7510.052	1481
33647	7590	01/25/2005	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, LLC (ITW)			SHAW, CLIFFORD C	
14135 NORTH CEDARBURG ROAD			ART UNIT	
MEQUON, WI 53097			PAPER NUMBER	
			1725	

DATE MAILED: 01/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/604,482	REYNOLDS ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Clifford C Shaw	1725	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____.  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1213</u> .  | 6) <input type="checkbox"/> Other: ____.                                    |

**Detailed Action**

1.) The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2.) Claims 1, 2, 9, 10, 12, 19, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066, cited by applicant). Figure 6 and the discussion thereof in the European patent application no. 0575082A2 disclose a welding system with features claimed including: a power source 3; electrode holder 53; transmitter 6 that when activated emits signals to control the welding process; receiver 4 that receives signals from the transmitter, which signals are coupled to and transmitted over the welding cable 2. The claims differ from the European patent application no. 0575082A2 in calling for the trigger associated with the transmitter to be on the electrode holder. This difference does not patentably distinguish over the prior art. The European patent application no. 0575082A2 does not explicitly disclose how the transmitter 6 is configured with respect to the welding torch. Without any explicit teaching, it would have been obvious at the time applicant's invention was made to have positioned element 6 with respect to torch 53 in any conventional fashion. In particular, it would have been obvious to have mounted transmitter 6 and its associated triggers on welding torch 53, the motivation being the teachings of Bulwidas, Jr. (4,227,066) that it is advantageous to mount remote control units on a welding torch (see element 15 mounted on torch handle 12 in Bulwidas, Jr. (4,227,066)). In regard to the claim language suggesting that the control signal commences a welding process, in column 3,

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last paragraph, the European patent application no. 0575082A2 states “the above described embodiment makes it possible to construct a wireless remote control suited for use both during and off welding”. Clearly, if the remote control controls functions during welding and not during welding, it must control the commencement of welding. In regard to the “kit” limitation of claim 25, it is considered obvious that the various modules of the control system would exist in an independent form before they were combined into the overall system. This independent form would constitute a “kit”, thereby satisfying the claim.

3.) Claims 3, 5, 13-18, 20, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Tunnell et al. (4,641,292, cited by applicant). The only aspect of the claims to which the rejection above does not apply is the provision for control of particular power supply output modes. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used the system of the European patent application no. 0575082A2 to control any well known power supply modes that are conventionally controlled by remote control units. In particular, it would have been obvious to have controlled the modes set forth in the claims, the motivation being the teachings of Tunnell et al. (4,641,292) that such are advantageously controlled by a remote control unit (see the power supply modes in column 9 of Tunnell et al. (4,641,292) and especially note the start/stop power supply modes and the increase/decrease current or voltage power supply modes, all of these modes being controlled by the remote control unit).

4.) Claims 3, 4, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Stringer (4,247,752). The only aspect of the claims to which the rejection above does not apply is the provision for control of constant current or constant voltage output modes and control of the power supply based on sensed voltage and current . This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any well known power supply in Bulwidas, Jr. (4,227,066), including one with the features claimed, the motivation being the teachings of Stringer (4,247,752) that such are advantageous (see the abstract and figure 1 of Stringer (4,247,752)).

5.) Claims 6-8 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Brunner et al. (6,570,132, cited by applicant). The only aspect of the claims to which the rejection above does not apply is the provision for control based on a pulse width modulation scheme. This difference does not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have used any well known data modulation approach in the system of the European patent application no. 0575082A2. In particular, it would have been obvious to have used a pulse width modulation scheme, the motivation being the teachings of Brunner et al.

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(6,570,132) that such is advantageous for remote control of a welding system (see figures 3 and 4 and the discussion in columns 9 and 10 of Brunner et al. (6,570,132)).

6.) Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over the European patent application no. 0575082A2 taken with Bulwidas, Jr. (4,227,066) as applied to claims 1, 2, 9, 10, 12, 19, and 25 above, and further in view of Tabata et al. (5,043,557). The only aspect of the claims to which the rejection above does not apply is the provision for control of the power supply based on voltage feedback and based on accommodation for cable losses . These differences do not patentably distinguish over the prior art. At the time applicant's invention was made, it would have been obvious to have provided the power supply of Bulwidas, Jr. (4,227,066) with the control features claimed, the motivation being the teachings of Tabata et al. (5,043,557) that such control approaches are advantageous for an arc welding power supply (see the abstract and the discussion of figure 1 in Tabata et al. (5,043,557) and note the voltage control implemented by elements 6 and 9 and the cable compensation as discussed in the abstract).

7.) Applicant's arguments filed 12/13/2004 have been fully considered but they are not persuasive. Applicant argues that the European patent application no. 0575082A2 does not teach the triggering arrangement claimed by applicant. This argument is not persuasive. The transmitter of the European patent application no. 0575082A2 must inherently have some sort of human interface that translates the motion of the human user into an electrical signal to control



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the system. This interface constitutes the “trigger” in that it triggers a desired control signal.

Placing this triggering unit on a welding torch is obvious as discussed above. Applicant argues that the European patent application no. 0575082A2 does not teach commencing a welding process. This argument is not persuasive. The European patent application no. 0575082A2 clearly teaches control in both welding and non-welding states, which would clearly involve control associated with commencing a welding operation.

8.) **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

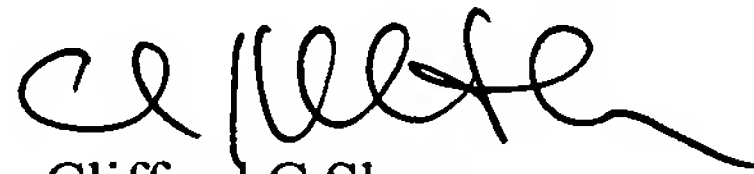
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Clifford C Shaw at telephone number 571-272-1182. The examiner can normally be reached on Monday through Friday of the first week of the pay period and on Tuesday through Friday of the second week of the pay period.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Thomas G. Dunn, can be reached at 571-272-1171. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Clifford C Shaw  
Primary Examiner  
Art Unit 1725

January 24, 2005